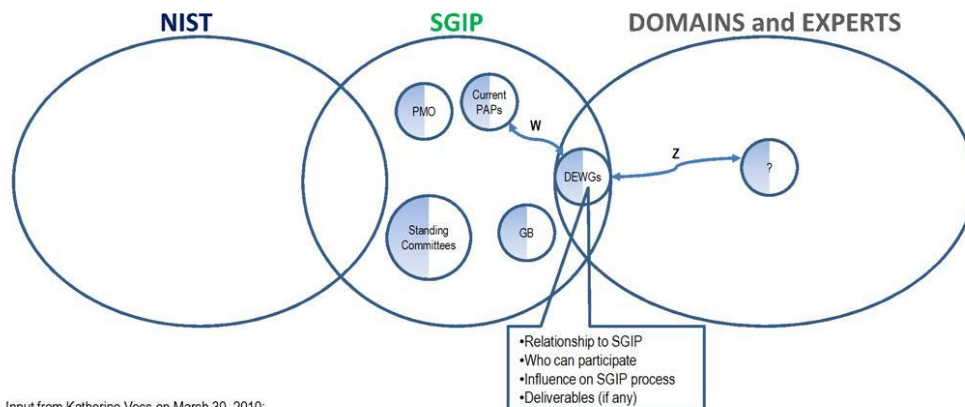


Charter Comments

Tuesday, April 06, 2010
10:54 AM

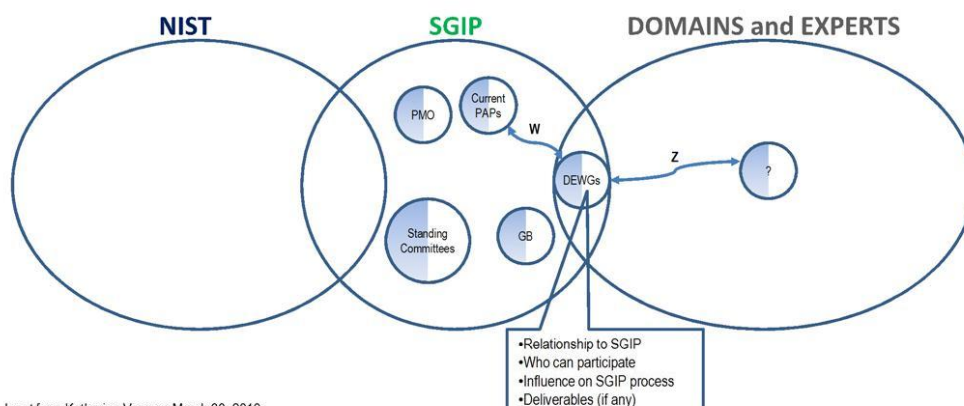
Charter for Domain Expert Work Groups Input on Draft, submission 1



Input from Katherine Voss on March 30, 2010:

- A. I support the feedback in the discussion on March 30 that the notion of the DEWGs is not to function as an SGIP working group but rather more of forum for idea generation and thought leadership on a particular domain. If this is the notion, then this notion needs to be communicated in the charter document.
- B. I would like to see the charter define the relationship of DEWGs in a visual fashion as shown above. The next step in developing this graphic would be an exercise to add labeled arrows showing the expected communications between the DEWGs and the other groups (e.g., arrow labeled W where W would be defined).
- C. In regard to item B above, I also would like to ask the question if the DEWGs can communicate back to the domains and the experts as suggested by the arrow labeled Z.
- D. The charter, in addition to including the above information, should include at least the content suggested in the rectangular callout balloon shown above. Other content is, of course, possible.
- E. In order to establish their long-term relevance, the charter would benefit from including guidance as to:
 - i. how and why the SGIP as a whole should interface with, and support the DEWGs, and vice versa,
 - ii. why one should join a DEWG, and
 - iii. What the expectations are of participants (if any).

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Domain Expert Working Groups:

The SGIP structure includes a number of “DEWGs,” which perform analysis of standards interoperability for the SGIP, including evaluation and support of Priority Action Plans (PAPs), and provide the strategic domain perspective on the evolution of the NIST Smart Grid

Interoperability Framework.

Two DEWGs should be of particular interest to this newsletter's readers, namely Buildings-to-Grid (B2G) and Industry-to-Grid (I2G). These groups comprise domain experts who focus on interoperability with the electric grid. Discussion topics include industrial and building automation systems—critical components that will enable the respective facilities to effectively manage energy consumption (and in many cases generation) through emerging grid interactions. B2G and I2G support SGIP activities and explore strategic issues related to the smart grid and their domains.

Some comments on the DEWG charter document:

I quite liked the document that generally describes the composition, function, and role of DEWGs in SGIP. One minor comment: when talking about membership the charter document says, "Members roughly represent the domains referred to in the group name. Members bring domain expertise to the table, with a variety of specific technical or policy or other application expertise that together benefits the discussion around smart grid interoperability issues as they pertain to that domain." This is fine with respect to membership. I do think, however, that there should be a standard way to explicitly refine the "domain" that is the scope of interest of a DEWG beyond that merely implied by its group name.

There are two aspects to the DEWGs mission, one in which they are seen as a resource for other SGIP groups and another in which they act independently and strategically. Here's a quick unpolished draft for what I have in mind:

DEWGs are repositories of broad domain expertise that are available to all SGIP groups as needed to assist these groups in the fulfillment of their responsibilities. DEWGs also work independently to identify and/or resolve smart grid interoperability issues related to their domains, informing and engaging other SGIP groups as appropriate.

Mission : a more direct tactical role should be more clearly a part of the mission according to Rich Kalish (sp?)

Membership: the membership is apparently open to anyone, not just SGIP members. Since this is a bit unusual, this should be made more explicit.

Liaisons: David seems to think that there should be another more formalized connection to SGIP, specifically to the Architecture Committee.

Tariq: PMO is focused on PAPs, but there are other things of SGIP interest that are not tightly coupled with PAP execution.

DEWGS are repositories of domain expertise that can be employed by SGIP and other organizations as needed.

Rich: communication should be initiated both ways.

More questions on why this seems to try to limit paths by which the SGIP can interact with a DEWG. How does one get the attention of a DEWG? Should we define a basic administrative mechanism that could then be used for this (keep email links to the chairs of one or all

of the DEWGs)?

We should try to encourage more use of the DEWGs by the PAPs and other groups in SGIP. Perhaps this document should reflect that goal.

Mission -- Provide both strategic and tactical domain expertise perspectives to the SGIP, SGIP subcommittees, and PAP's for the analysis and development of Smart Grid interoperability standards.

PMO – Coordinate issues between DEWGs and PAPs , as well as SGIP subcommittees

Roles and Responsibilities;

- Identify gaps and redundancy in standards
- Recommend new PAPs
- Develop white papers on issues deemed valuable by the DEWG or have been requested by a PAP, SGAC, CSWG and SGIP
- Provide input to AGAC regarding the conceptual reference model
- Provide input to relevant PAPs in terms of issues, positions, white papers, and use cases
- Provide a resource to PAPs on issues identified by a PAP.
- Review and provide comments to relevant PAPs on the PAP scope, use cases and deliverables

Expectation of PAPs- That PAPs will seek out and involve relevant DEWGs in development of PAP scope, use cases and deliverables

1. Manufacturing loads typically "claim" have a high load factor (i.e., average to peak load ratio) unlike residential. ("claim" because a good energy audit exercise should help manufacturers identify critical from non critical loads and actually lower this ratio).

About 60% of the energy is spent by less than 4000 plants in U.S., the rest in 194000+ plants. Therefore, real time control is essential for Smart Grid to work optimally with Industrial loads, which means real time control with a high level of determinism, quite different from residential loads, is absolutely essential. A requirement may be to respond to AGC signals and provisions and abide by applicable standards to help large manufacturers assume the role of a utility to provide load reliability and load regulation services.

2. PAP15 is missing. While it is aimed at appliances, I think extensibility to Industries should be explored. This is the only way wherein Ethernet, the defacto communication standard can be utilized to much advantage.

Information from PAP15 which may be of interest.

The Home-to-Grid (H2G) Domain Expert Working Group (DEWG) has a subgroup led by Conrad Eustis of Portland General Electric that has drafted a paper, "Free Market Choice for Appliance Physical Layer Communications". The document is attached to this e-mail and it is also available in the attachments section of the H2G TWiki home page at <http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/H2G> We'd like comments to be preferably posted as attachments to the H2G TWiki page using the attached form by April 12.